

# METHOD AND APPARATUS FOR PROVIDING ELECTRICAL PROTECTION TO A PROTECTED CIRCUIT

## Abstract

An apparatus for providing electrical protection to a protected circuit in electrical communication with an electrical source is disclosed. The apparatus includes a housing, a separable conduction path in series connection with the protected circuit, an operating mechanism in operable communication with the separable conduction path, a thermal element in thermal communication with the separable conduction path, and an electronic trip unit in signal communication with the thermal element and in operable communication with the operating mechanism. The electronic trip unit is adapted to sense a voltage drop across the thermal element and to trip the operating mechanism in response to the sensed voltage drop being in excess of a first trip threshold.